Examiner S.N. Qazi

Docket No.: PAZ-222CN Group Art 1616

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions of the claims and listing of the claims in the application:

1. (Currently Amended) A compound of formula I:

wherein:

X is CHC(R¹³Y'Y) or CR⁶'R⁶;

R², R⁴, R⁴, R⁷ and R⁷ are each hydrogen, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, arylalkyl, aryl, heterocyclic, heteroaromatic or a prodrug moiety;

R², R³, R¹⁰, R¹¹ and R¹² are each hydrogen or a pro-drug moiety;

R⁴ is NR⁴'R⁴", alkyl, alkenyl, alkynyl, aryl, hydroxyl, halogen, or hydrogen;

R⁵ is hydroxyl, hydrogen, thiol, alkanoyl, aroyl, alkaroyl, aryl, heteroaromatic, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, arylalkyl, alkyl carbonyloxy, or aryl carbonyloxy;

R⁶ and R⁶ are independently hydrogen, methylene, absent, hydroxyl, halogen, thiol, alkyl, alkenyl, alkynyl, aryl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, or an arylalkyl;

R⁸ is hydrogen, hydroxyl, halogen, thiol, alkyl, alkenyl, alkynyl, aryl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, or an arylalkyl;

R9 is aminomethylaminoalkyl;

R¹³ is hydrogen, hydroxy, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, or an arylalkyl;

Y' and Y are each independently hydrogen, halogen, hydroxyl, cyano, sulfhydryl, amino, alkyl, alkenyl, alkynyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, or an arylalkyl, and pharmaceutically acceptable salts, esters and prodrugs thereof.

2. (Original) The compound of claim 1, wherein R^4 is NR^4R^4 ; X is CR^6R^6 ; R^2 , R^2 , R^5 , R^6 , R^6 , R^8 , R^9 , R^{10} , R^{11} , and R^{12} are each hydrogen; and, R^4 , R^4 , R^7 , and R^7 are each lower alkyl.

Examiner S.N. Qazi

Docket No.: PAZ-222CN

Group Art 1616

- 3. (Original) The compound of claim 2, wherein R⁴, R⁴, R⁷, and R⁷ are each methyl.
- 4. (Cancelled).
- 5. (Currently Amended) The compound of claim 3 or 4, wherein said aminomethyl aminoalkyl is substituted with an alkyl group.
- 6. (Original) The compound of claim 5, wherein said alkyl group is methyl, ethyl, propyl, butyl, pentyl, hexyl, heptyl, octyl, nonyl, or decyl.
- 7. (Original) The compound of claim 6, wherein said alkyl group is a branched chain alkyl group.
- 8. (Original) The compound of claim 5, wherein said alkyl group is n-pentyl.
- 9. (Original) The compound of claim 5, wherein said alkyl group has six carbon atoms or fewer.
- 10. (Original) The compound of claim 5, wherein said alkyl group is unsubstituted.
- 11. (Original) The compound of claim 5, wherein said alkyl group is substituted.
- 12. (Original) The compound of claim 11, wherein said alkyl group is substituted with alkenyl, alkynyl, halogen, hydroxyl, alkylcarbonyloxy, arylcarbonyloxy, alkoxycarbonyloxy, aryloxycarbonyloxy, carboxylate, alkylcarbonyl, arylcarbonyl, alkoxycarbonyl, aminocarbonyl, alkylaminocarbonyl, dialkylaminocarbonyl, alkylthiocarbonyl, alkoxyl, phosphate, phosphonato, phosphinato, cyano, amino, acylamino, amidino, imino, sulfhydryl, alkylthio, arylthio, thiocarboxylate, sulfates, alkylsulfinyl, sulfonato, sulfamoyl, sulfonamido, nitro, trifluoromethyl, cyano, azido, heterocyclyl, alkylaryl, or an aromatic or heteroaromatic moiety.
- 13. (Original) The compound of claim 3, wherein said aminoalkyl is substituted with two alkyl groups.

Application No.: 10/786,881 Docket No.: PAZ-222CN

Examiner S.N. Qazi Group Art 1616

14. (Currently Amended) The compound of claim 5, wherein said compound is selected from the group consisting of:

or pharmaceutically acceptable salts, esters and prodrugs thereof.

15. (Previously Presented) The compound of claim 1, wherein said compound is

or pharmaceutically acceptable salts, esters and prodrugs thereof.

16. (Currently Amended) The compound of claim 3, wherein said aminoalkyl is of the formula -CH₂NR^{9c}C(=Z')ZR^{9a},

wherein

Z is $CR^{9d}R^{9e}$, S, NR^{9b} or O;

Z' is NR^{9f}, O or S; and

R^{9a}, R^{9b}, R^{9c}, R^{9c}, R^{9c} and R^{9f} are each independently hydrogen, acyl, alkyl, alkenyl, alkynyl, alkoxy, alkoxyalkyl, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylamino, arylalkyl, aryl, heterocyclic, heteroaromatic or a prodrug moiety.;

- 17. (Original) The compound of claim 16, wherein R^{9c} is hydrogen.
- 18. (Original) The compound of claim 16, wherein Z' is S, NH, or O.
- 19. (Original) The compound of claim 16, wherein Z is NR^{9b}, O or S.

Application No.: 10/786,881 Docket No.: PAZ-222CN

Examiner S.N. Qazi Group Art 1616

20. (Original) The compound of claim 19, wherein R9b is hydrogen or alkyl.

21. (Original) The compound of claim 16, wherein R^{9a} is an aryl group.

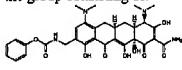
22. (Original) The compound of claim 21, wherein R⁹² is unsubstituted phenyl, para-tolyl, para-nitrophenyl, para-methoxy phenyl, para-dimethylamino phenyl, para-perfluoromethoxy phenyl, para-acetyl phenyl, benzodioxole, 3,5-diperfluoromethyl phenyl, para-bromo phenyl, para-chloro phenyl, or para-fluoro phenyl.

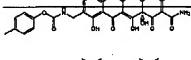
23. (Original) The compound of claim 21, wherein R^{9a} is a heterocycle.

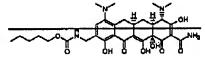
24. (Original) The compound of claim 16, wherein R^{9a} is substituted or unsubstituted alkyl.

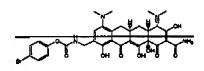
25. (Original) The compound of claim 16, wherein R^{9a} is substituted or unsubstituted alkenyl.

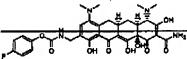
26. (Currently Amended) The compound of claim 16, wherein said compound is selected from the group consisting of:

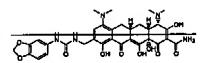


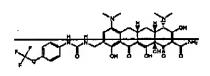


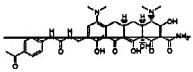


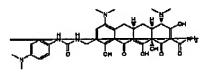


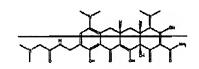


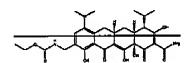


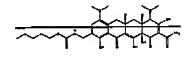






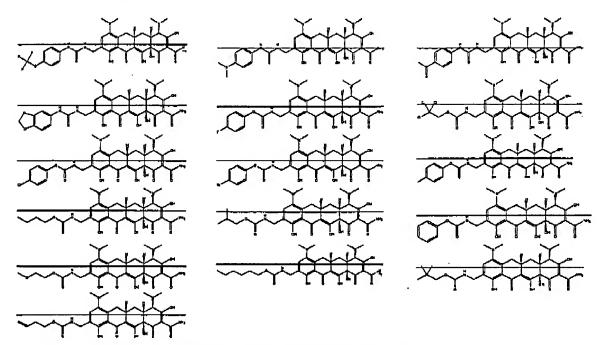






Examiner S.N. Qazi

Docket No.: PAZ-222CN Group Art 1616



or pharmaceutically acceptable salts, esters and prodrugs thereof.

27-37. (Cancelled)

- 38. (Currently Amended) A method for treating a <u>bacterial infection tetracycline responsive</u> state in a mammal, comprising administering to said subject a compound of claim 1, such that said subject is treated.
- 39. (Cancelled).
- 40. (Currently Amended) The method of claim 3839, wherein said bacterial infection is associated with gram positive bacteria.
- 41. (Currently Amended) The method of claim <u>38</u>29, wherein said bacterial infection is associated with gram negative bacteria.
- 42. (Currently Amended) The method of claim 3839, wherein said bacterial infection is associated with E. colt.

Examiner S.N. Qazi

Docket No.: PAZ-222CN

Group Art 1616

- 43. (Currently Amended) The method of claim 3839, wherein said bacterial infection is associated with S. aureus.
- 44. (Currently Amended) The method of claim 3839, wherein said bacterial infection is associated with E_i faecalis.
- 45. (Cancelled)
- 46. (Original) The method of claim 38, wherein said compound is administered with a pharmaceutically acceptable carrier.
- 47. (Original) The method of claim 38, wherein said subject is a human.
- 48. (Currently Amended) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claims 1 and a pharmaceutically acceptable carrier.
- 49. (New) The compound of claim 5, wherein said compound is: or pharmaceutically acceptable salts, esters and prodrugs thereof.
- 50. (New) The compound of claim 5, wherein said compound is: or pharmaceutically acceptable salts, esters and prodrugs thereof.
- 51. (New) The compound of claim 5, wherein said compound is: or pharmaceutically acceptable salts, esters and prodrugs thereof.
- 52. (New) The compound of claim 5, wherein said compound is: or pharmaceutically acceptable salts, esters and prodrugs thereof.

Examiner S.N. Qazi

Docket No.: PAZ-222CN

Group Art 1616

or pharmaceutically acceptable salts, esters and prodrugs thereof.

54. (New) The compound of claim 5, wherein said compound is: or pharmaceutically acceptable salts, esters and prodrugs thereof.

55. (New) The compound of claim 5, wherein said compound is: or pharmaceutically acceptable salts, esters and prodrugs thereof.

56. (New) The compound of claim 16, wherein said compound is:

, or pharmaceutically acceptable salts, esters and prodrugs thereof.

57. (New) The compound of claim 16, wherein said compound is:

, or pharmaceutically acceptable salts, esters and prodrugs thereof.

58. (New) The compound of claim 16, wherein said compound is:

or pharmaceutically acceptable salts, esters and prodrugs thereof.

59. (New) The compound of claim 16, wherein said compound is:

or pharmaceutically acceptable salts, esters and prodrugs thereof.

Examiner S.N. Qazi

Docket No.: PAZ-222CN

Group Art 1616

60. (New) The compound of claim 16, wherein said compound is:

or pharmaceutically acceptable salts, esters and prodrugs thereof.

61. (New) The compound of claim 16, wherein said compound is:

, or pharmaceutically acceptable salts, esters and prodrugs thereof.

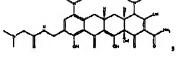
62. (New) The compound of claim 16, wherein said compound is:

, or pharmaceutically acceptable salts, esters and prodrugs thereof.

63. (New) The compound of claim 16, wherein said compound is:

, or pharmaceutically acceptable salts, esters and prodrugs thereof.

64. (New) The compound of claim 16, wherein said compound is: or pharmaceutically acceptable salts, esters and prodrugs thereof.



- 65. (New) The compound of claim 16, wherein said compound is: or pharmaceutically acceptable salts, esters and prodrugs thereof.

66. (New) The compound of claim 16, wherein said compound is: or pharmaceutically acceptable salts, esters and prodrugs thereof.

Examiner S.N. Qazi

Docket No.: PAZ-222CN

Group Art 1616

67. (New) The compound of claim 16, wherein said compound is:

or pharmaceutically acceptable salts, esters and prodrugs thereof.

68. (New) The compound of claim 16, wherein said compound is:

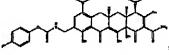
or pharmaceutically acceptable salts, esters and prodrugs thereof.

69. (New) The compound of claim 16, wherein said compound is:

or pharmaceutically acceptable salts, esters and prodrugs thereof.

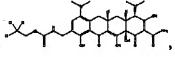
70. (New) The compound of claim 16, wherein said compound is:

or pharmaceutically acceptable salts, esters and prodrugs thereof.



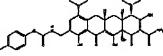
71. (New) The compound of claim 16, wherein said compound is:

or pharmaceutically acceptable salts, esters and prodrugs thereof.



72. (New) The compound of claim 16, wherein said compound is:

or pharmaceutically acceptable salts, esters and prodrugs thereof.



73. (New) The compound of claim 16, wherein said compound is:

or pharmaceutically acceptable salts, esters and prodrugs thereof.

Examiner S.N. Qazi

Docket No.: PAZ-222CN

Group Art 1616

74. (New) The compound of claim 16, wherein said compound is:

or pharmaceutically acceptable salts, esters and prodrugs thereof.

,

75. (New) The compound of claim 16, wherein said compound is:

pharmaceutically acceptable salts, esters and prodrugs thereof.

76. (New) The compound of claim 16, wherein said compound is:

or pharmaceutically acceptable salts, esters and prodrugs thereof.

77. (New) The compound of claim 16, wherein said compound is:

or pharmaceutically acceptable salts, esters and prodrugs thereof.

04444

78. (New) The compound of claim 16, wherein said compound is:

or pharmaceutically acceptable salts, esters and prodrugs thereof.

79. (New) The compound of claim 16, wherein said compound is:

or pharmaceutically acceptable salts, esters and prodrugs thereof.

80. (New) The compound of claim 16, wherein said compound is:

or pharmaceutically acceptable salts, esters and prodrugs thereof.

Examiner S.N. Qazi

Docket No.: PAZ-222CN

Group Art 1616

81. (New) The compound of claim 16, wherein said compound is:

or pharmaceutically acceptable salts, esters and prodrugs thereof.

82. (New) The compound of claim 16, wherein said compound is: or pharmaceutically acceptable salts, esters and prodrugs thereof.

83. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 14, such that said subject is treated.

84. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 15, such that said subject is treated.

85. (New) The method of claim 84, wherein said bacterial infection is associated with gram positive bacteria.

86. (New) The method of claim 84, wherein said bacterial infection is associated with gram negative bacteria.

87. (New) The method of claim 84, wherein said bacterial infection is associated with E. coli.

88. (New) The method of claim 84, wherein said bacterial infection is associated with S. aureus.

89. (New) The method of claim 84, wherein said bacterial infection is associated with E. faecalis.

90. (New) The method of claim 84, wherein said compound is administered with a pharmaceutically acceptable carrier.

91. (New) The method of claim 84, wherein said subject is a human.

Examiner S.N. Qazi

Docket No.: PAZ-222CN Group Art 1616

- 92. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 26, such that said subject is treated.
- 93. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 49, such that said subject is treated.
- 94. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 50, such that said subject is treated.
- 95. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 51, such that said subject is treated.
- 96. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 52, such that said subject is treated.
- 97. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 53, such that said subject is treated.
- 98. (New) A method for treating a bacterial infection in a mammal, comprising administrating a said subject a compound of claim 54, such that said subject is treated.
- 99. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 55, such that said subject is treated.
- 100. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 56, such that said subject is treated.
- 101. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 57, such that said subject is treated.
- 102. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 58, such that said subject is treated.

Examiner S.N. Qazi

Docket No.: PAZ-222CN Group Art 1616

103. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 59, such that said subject is treated.

104. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 60, such that said subject is treated.

105. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 61, such that said subject is treated.

106. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 62, such that said subject is treated.

107. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 63, such that said subject is treated.

108. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 64, such that said subject is treated.

109. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 65, such that said subject is treated.

110. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 66, such that said subject is treated.

111. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 67, such that said subject is treated.

112. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 68, such that said subject is treated.

113. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 69, such that said subject is treated.

Examiner S.N. Qazi

Docket No.: PAZ-222CN Group Art 1616

114. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 70, such that said subject is treated.

115. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 71, such that said subject is treated.

116. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 72, such that said subject is treated.

117. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 73, such that said subject is treated.

118. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 74, such that said subject is treated.

119. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 75, such that said subject is treated.

120. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 76, such that said subject is treated.

121. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 77, such that said subject is treated.

122. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 78, such that said subject is treated.

123. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 79, such that said subject is treated.

124. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 80, such that said subject is treated.

Examiner S.N. Qazi

Docket No.: PAZ-222CN

Group Art 1616

125. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 81, such that said subject is treated.

126. (New) A method for treating a bacterial infection in a mammal, comprising administering to said subject a compound of claim 82, such that said subject is treated.

127. (New) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 14 and a pharmaceutically acceptable carrier.

128. (New) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 15 and a pharmaceutically acceptable carrier.

129. (New) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 26 and a pharmaceutically acceptable carrier.

130. (New) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 49 and a pharmaceutically acceptable carrier.

131. (New) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 50 and a pharmaceutically acceptable carrier.

132. (New) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 51 and a pharmaceutically acceptable carrier.

133. (New) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 52 and a pharmaceutically acceptable carrier.

134. (New) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 53 and a pharmaceutically acceptable carrier.

135. (New) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 54 and a pharmaceutically acceptable carrier.

Examiner S.N. Qazi

Docket No.: PAZ-222CN Group Art 1616

136. (New) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 55 and a pharmaceutically acceptable carrier.

137. (New) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 56 and a pharmaceutically acceptable carrier.

138. (New) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 57 and a pharmaceutically acceptable carrier.

139. (New) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 58 and a pharmaceutically acceptable carrier.

140. (New) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 59 and a pharmaceutically acceptable carrier.

141. (New) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 60 and a pharmaceutically acceptable carrier.

142. (New) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 61 and a pharmaceutically acceptable carrier.

143. (New) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 62 and a pharmaceutically acceptable carrier.

144. (New) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 63 and a pharmaceutically acceptable carrier.

145. (New) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 64 and a pharmaceutically acceptable carrier.

146. (New) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 65 and a pharmaceutically acceptable carrier.

Examiner S.N. Qazi

05/22/2007 12:56 FAX 6177424214

Docket No.: PAZ-222CN Group Art 1616

147. (New) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 66 and a pharmaceutically acceptable carrier.

148. (New) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 67 and a pharmaceutically acceptable carrier.

149. (New) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 68 and a pharmaceutically acceptable carrier.

150. (New) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 69 and a pharmaceutically acceptable carrier.

151. (New) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 70 and a pharmaceutically acceptable carrier.

A pharmaceutical composition comprising a therapeutically effective amount of a 152. (New) compound of claim 71 and a pharmaceutically acceptable carrier.

A pharmaceutical composition comprising a therapeutically effective amount of a 153. (New) compound of claim 72 and a pharmaceutically acceptable carrier.

A pharmaceutical composition comprising a therapeutically effective amount of a 154. (New) compound of claim 73 and a pharmaceutically acceptable carrier.

A pharmaceutical composition comprising a therapeutically effective amount of a 155. (New) compound of claim 74 and a pharmaceutically acceptable carrier.

A pharmaceutical composition comprising a therapeutically effective amount of a 156. (New) compound of claim 75 and a pharmaceutically acceptable carrier.

A pharmaceutical composition comprising a therapeutically effective amount of a 157. (New) compound of claim 76 and a pharmaceutically acceptable carrier.

Examiner S.N. Qazi

Docket No.: PAZ-222CN

Group Art 1616

158. (New) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 77 and a pharmaceutically acceptable carrier.

159. (New) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 78 and a pharmaceutically acceptable carrier.

160. (New) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 79 and a pharmaceutically acceptable carrier.

161. (New) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 80 and a pharmaceutically acceptable carrier.

162. (New) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 81 and a pharmaceutically acceptable carrier.

163. (New) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 82 and a pharmaceutically acceptable carrier.